

REMARKS

Claims 1-24 are currently pending in the subject application, and are presently under consideration. Claims 16-18 are allowed. Claims 1-8 and 19-24 are rejected. Claims 1-3, 19, and 21-24 have been amended. Claims 9-15 have been cancelled. New claims 25-30 have been added. Favorable reconsideration of the application is requested in view of the amendments and comments herein.

I. Election/Restrictions

Applicant has elected with traverse to prosecute the invention of Group I, claims 1-8 and 16-24. Claims 9-15 are to be withdrawn from further consideration by the Examiner as being drawn to a non-elected invention, and have been cancelled.

II. Title

The title of the invention has been objected to as not being descriptive. Applicant has amended the title as suggested by the Examiner and such amendment has been made.

III. Rejection of Claims 1, 6-8, 19 and 21-23 Under 35 U.S.C. §102(e)

Claims 1, 6-8, 19, and 21-23 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,493,790 to Khieu, et al. ("Khieu"). Claims 1, 19, and 21-23 have been amended. Withdrawal of this rejection is respectfully requested for at least the following reasons.

Amended claim 1 recites that the plurality of CAM fields comprises a first field and a second field, and further recites at least one input selector that enables access to the first field in a first mode and the second field in a second mode. Neither Khieu, nor any other cited art, teaches mode selection for enabling access to separate CAM fields, and therefore the cited art does not teach a plurality of CAM fields comprising a first field and a second field, and at least one input selector that enables access to the first field in a first mode and the second field in a second mode, as recited in amended claim 1. Withdrawal of the rejection of claim 1, as well as claims 2-8 which depend therefrom, is respectfully requested.

Claim 19 has been amended to recite selecting a first CAM field from a memory entry in a first mode and a second CAM field from the memory entry in a second mode, and enabling access between comparison logic associated with the CAM field and the selected one of the first CAM field and the second CAM field. For the reasons described above regarding amended claim 1, the cited art does not teach selecting a first CAM field from a memory entry in a first mode and a second CAM field from the memory entry in a second mode, and enabling access between comparison logic associated with the CAM field and the selected one of the first CAM field and the second CAM field, as recited in amended claim 19. Withdrawal of the rejection of claim 19, as well as claims 20-21, is respectfully requested.

Claim 22 has been amended to recite means for selectively enabling access to a stored physical address associated with a first CAM field if a physical address mode is selected and a stored virtual address associated with a second CAM field if a virtual address mode is selected, and means for comparing the selectively enabled CAM field to a search value. Neither Khieu, nor any other cited art, teaches selection between a physical mode and a virtual mode to enable access to a respective physical address and a virtual address associated with first and second CAM fields. Accordingly, the cited art does not teach means for selectively enabling access to a stored physical address associated with a first CAM field if a physical address mode is selected and a stored virtual address associated with a second CAM field if a virtual address mode is selected, and means for comparing the selectively enabled CAM field to a search value, as recited in amended claim 22. Withdrawal of the rejection of claim 22, as well as claims 23-24 which depend therefrom, is respectfully requested.

For the reasons described above, claims 1, 6-8, 19, and 21-23 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

IV. Rejection of Claims 2-3, 20, and 24 Under 35 U.S.C. §103(a)

Claims 2-3, 20, and 24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Khieu as applied to claim 1 above, and further in view of U.S. Patent No. 5,383,146 to Threewitt ("Threewitt"). Claims 2, 3, and 24 have been amended. Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 2, which depends from amended claim 1, has been amended to recite that the first field is associated with a physical address and the second field is associated with a virtual address. For the reasons described above regarding amended claim 22, amended claim 2 should be allowed over the cited art. Withdrawal of the rejection of claim 2 is respectfully requested.

Claim 3, which depends from amended claim 1, has been amended to recite that at least one of the first field and the second field is interleaved with at least one other of the plurality of CAM fields. Neither Khieu, nor any other cited art, teaches or suggests interleaving CAM fields with other CAM fields in a CAM entry, and thus the cited art does not teach or suggest at least one of the first field and the second field is interleaved with at least one other of the plurality of CAM fields, as recited in amended claim 3. Withdrawal of the rejection of claim 3 is respectfully requested.

Claim 24, which depends from amended claim 22, has been amended to recite that the CAM system is a translation look-aside buffer. For the reasons discussed above regarding amended claim 22, amended claim 22 should be allowed over the cited art, and therefore, amended claim 24 should also be allowed over the cited art. Withdrawal of the rejection of claim 24 is respectfully requested.

V. Rejection of Claims 4 and 5 Under 35 U.S.C. §103(a)

Claims 4 and 5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Khieu. Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 4, which depends from amended claim 1, recites that the match evaluator comprises at least one pull-down field effect transistor. For the reasons described above regarding amended claim 1, claim 4 should be allowed over the cited art. Withdrawal of the rejection of claim 4 is respectfully requested.

Claim 5, which depends from amended claim 1, recites that the at least one input selector comprises at least one multiplexer. For the reasons described above regarding amended claim 1, claim 5 should be allowed over the cited art. Withdrawal of the rejection of claim 5 is respectfully requested.

VI. New Claims 25-30

New claim 25, which depends from amended claim 1, recites that the CAM system is a translation look-aside buffer. For the reasons discussed above regarding amended claim 1, new claim 25 should also be allowed over the cited art. Consideration and allowance of new claim 25 is respectfully requested.

New claim 26, which depends from amended claim 1, recites that the CAM entry comprises a plurality of storage units, at least one of the plurality of storage units being associated with both the first field and the second field. For the reasons discussed above regarding amended claim 1, new claim 26 should also be allowed over the cited art. In addition, the cited art, individually or in combination, does not teach or suggest that the CAM entry comprises a plurality of storage units, at least one of the plurality of storage units being associated with both the first field and the second field, as recited in new claim 26. Consideration and allowance of new claim 26 is respectfully requested.

New claim 27, which depends from claim 16, recites that the CAM system is a translation look-aside buffer. Claim 16 is an allowed claim, thus rendering new claim 27 allowable.

New claim 28, which depends from amended claim 19, recites that the CAM system is a translation look-aside buffer. For the reasons discussed above regarding amended claim 19, new claim 28 should also be allowed over the cited art. Consideration and allowance of new claim 28 is respectfully requested.

New claim 29, which depends from amended claim 19, recites interleaving the first CAM field in the memory entry with the second CAM field in the memory entry. For the reasons discussed above regarding amended claim 19, new claim 29 should also be allowed over the cited art. In addition, the cited art, individually or in combination, does not teach or suggest interleaving the first CAM field in the memory entry with the second CAM field in the memory entry, as recited in new claim 29. Consideration and allowance of new claim 29 is respectfully requested.

New claim 30, which depends from amended claim 19, recites that each memory entry comprises a plurality of storage units, the method further comprising associating at least

one of the plurality of storage units with both the first CAM field and the second CAM field. For the reasons discussed above regarding amended claim 19, new claim 30 should also be allowed over the cited art. In addition, the cited art, individually or in combination, does not teach or suggest that each memory entry comprises a plurality of storage units, at least one of the plurality of storage units being associated with both the first CAM field and the second CAM field, as recited in new claim 30. Consideration and allowance of new claim 30 is respectfully requested.

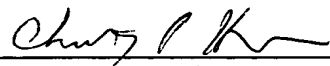
CONCLUSION

In view of the foregoing remarks, Applicant respectfully submits that the present application is in condition for allowance. Applicant respectfully requests reconsideration of this application and that the application be passed to issue.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 08-2025.

Respectfully submitted,

Date 1/5/05



Christopher P. Harris
Registration No. 43,660

CUSTOMER No.: 022879

TAROLLI, SUNDHEIM, COVELL, & TUMMINO L.L.P.
526 SUPERIOR AVENUE, SUITE 1111
CLEVELAND, OHIO 44114-1400
Phone: (216) 621-2234
Fax: (216) 621-4072